Application No: 10/046,633 Attorney's Docket No: NL 010037

## **REMARKS/ARGUMENTS**

Applicant acknowledges receipt of the Office Action dated February 21, 2006. Reconsideration and further examination of claims 1, 2, 4-9, 11, 12, 14, 15, 17, 18, 20, 21, 23, 24 and 26-29 is respectfully requested.

By this amendment, claims 1, 4-8, 11, 14, 17, 20, 23, 26-29 are amended.

In paragraph 1 on page 2, the Office Action rejects claims 1, 2, 4-9, 11, 12, 14, 15, 17, 18, 20, 21, 23, 24 and 26-29 under 35 U.S.C. § 112, second paragraph, as being indefinite for the specified reason. This rejection is respectfully traversed.

The subject matter giving rise to the rejection includes the word "substantially," and the rejection focuses on the inclusion of this word. Claims 1, 8, 11, 14, 17, 20 and 23, from which claims 2, 4-7, 9, 12, 15, 18, 21, 24, and 26-29 depend, respectively, have been amended to remove the word substantially. Applicants respectfully submit that the many examples given in the specification may clear that actual minimums exist, and that the actual minimums are not at 0.

It is respectfully submitted that the pending claims are definite as required by 35 U.S.C. § 112, second paragraph. For at least the foregoing reasons it is respectfully requested that the rejection of claims 1, 2, 4-9, 11, 12, 14, 15, 17, 18, 20, 21, 23, 24 and 26-29 as being indefinite, be withdrawn.

This being the only rejection of claims 2, 9, 12, 15, 18, 21 and 24 it is respectfully submitted that those claims are allowable.

Application No: 10/046,633

Attorney's Docket No: NL 010037

In section 3 on pages 3-7, the Office Action rejects the claims 1, 4-8, 11, 14, 17, 20, 23 and 26-29 under 35 U.S.C. § 103(a) has been unpatentable over U.S. Patent No. 6,662,337 to Brink in view of U.S. Patent No. 5,931,965 to Alamouti. This rejection is respectfully traversed.

All of the pending claims recite that  $D_a > D_f$  and that  $H_1$  has a minimum value. The Office Action correctly concedes that Brink fails disclose, teach or suggest this subject matter. In order to overcome this deficiency in Brink, the Office Action relies on Alamouti.

Claims 1, 8, 11, 14, 17, 20 and 23, from which claims 4-7 and 26-29 depend, recite that the signal constellation is a variable signal constellation. Support for this subject matter is clear throughout the specification. See, e.g., application page 5, lines 22-24; page 6, lines 5-6; page 8, lines 8-20; page 9, lines 13-19; page 10, lines 24-29; and page 14, lines 4-8. In clear contradistinction to the variable signal constellation disclosed in the application and recited in the rejected claims, Alamouti discloses merely one extraordinarily simple signal constellation satisfying the criteria recited in the rejected claims. Thus, it is respectfully submitted that the combination of the extraordinarily simple single signal constellation disclosed in Alamouti with the teachings and suggestions of Brink fails to arrive at the subject matter recited in the rejected claims, pertaining to a variable signal constellation.

For at least the forgoing reasons, it is respectfully requested that the rejection of claims 1, 4-8, 11, 14, 17, 20, 23, and 26-29 as being unpatentable over Brink in view Alamouti be withdrawn.

MAY-22-2006 17:22

Application No: 10/046,633

Attorney's Docket No: NL 010037

In section 4 on page 7, the Office Action objects to claims 4-7 and 26-29 for the specified

informality. The claims are amended as suggested by the Office Action. Therefore, it is

respectfully requested that the objection to claims 4-7 and 26-29 be withdrawn.

While we believe that the instant amendment places the application in condition for

allowance, should the Examiner have any further comments or suggestions, it is respectfully

requested that the Examiner telephone the undersigned attorney in order to expeditiously resolve

any outstanding issues.

In the event that the fees submitted prove to be insufficient in connection with the filing

of this paper, please charge our Deposit Account Number 50-0578 and please credit any excess

fees to such Deposit Account.

Respectfully submitted,

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Date: May 22, 2006

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